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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,371	11/24/2000	Chang-Woong Yoo	P56218	3060

7590 06/16/2005

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EXAMINER

SHRADER, LAWRENCE J

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/718,371

Applicant(s)

YOO, CHANG-WOONG

Examiner

Lawrence Shrader

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the Applicant's amendment filed on 8/31/2004.
2. Claims 1 – 22 remain rejected and are pending.

Oath/Declaration

3. The 37 C.F.R. §1.181 petition filed by the Applicant on 6/09/2004 has been treated as a request for reconsideration, and the objection to the Oath/Declaration in the previous Office Action is withdrawn.

Claim Rejections - 35 USC § 112

4. **Claim 1** rejected in the previous Office Action under 35 U.S.C. 112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, has been withdrawn in view of the amendment clarifying that the operating system is initially installed by a user before being reinstalled later in the claim.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Art Unit: 2193

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites:

“input means for reading out the product key information from the memory means and inputting the read-out product key information in an information input window for product certification of the operating system program when a product key of an operating system program being reinstalled is matched with the read-out product key information.”

This limitation is unclear. For example, “the input means for reading out the product key information” appears to imply an output operation conducted by an input means, which is contradictory as written. After the product key information is read out it is not clear whether the input means, which appears to have just read out the information, then inputs the information in an input window, or if the user inputs the information into the input window. As written, the meaning could be taken either way. Then this information is eventually matched with further product key information that comes from some unspecified source at a reinstallation.

There seems to be a missing step or structure in this claim causing the ambiguity and overall vagueness.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 recites:

“checking whether the read-out product key information is matched with product key information of an operating system program that will be reinstalled;”

Art Unit: 2193

This limitation is unclear because the source of the product key information of an operating system that will be reinstalled is not mentioned in the limitations of the claim. Also, there seems to be a comparing step that is missing between the “reading out” step and the “checking” step.

The preamble speaks of manually inputting a product key by a user. However, that missing step has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). The noted recitation is found in the preambles of claims 1, 7, 13, and 14.

As with claim 1, there seems to be a missing step or structure in this claim causing the ambiguity and overall vagueness.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2193

7. Claims 1, 2, 4, 5; 8 – 10; 11, 12; and 21 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 (hereinafter referred to as Hoggarth) in view of “Installing Windows 98 on an Aptiva 2168 system” (hereinafter referred to as Aptiva), and further in view of Krosner et al., U.S. Patent 5,905,494 (hereinafter referred to as Krosner).

In regard to claim 1:

“a storing means for storing the operating system program;

memory means storing BIOS setup information used by a BIOS program stored in said BIOS ROM said memory means storing the product key information of the operating system, said product key information being input by a user, when the operating system program is initially installed in the storing means;

writing means for writing the product key information in the memory means;

input means for reading out the product key information from the memory means and inputting the read-out product key information in an information input window for product certification of the operating system program when a product key of an operating system program being reinstalled is matched with the read-out product key information.”

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means, but neither Hoggarth nor the Aptiva reference discloses read-out product key information. However, Krosner discloses that a user may be prompted for information in a field when installing an operating system by having a suggested possible entry (a read-out field; column 1, lines 33 – 53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system

Art Unit: 2193

product key as taught by the Aptiva reference, and further modified by the Krosner invention having the ability to prompt the user with suggested information, because the modification obviously allows the user to retrieve information from the system without referring to any other resources like installation documentation and Krosner even mentions installing operating systems and prompting the user possible entries during the installation (column 1, lines 52), which is a motivation to combine the Hoggarth and Aptiva with Krosner.

Hoggarth also discloses a storing means for storing an operating system program (column 9, lines 25 – 38); and a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means (column 10, lines 1 – 19), but does not explicitly disclose a user entering the operating system product key information via a window. However, an operating system upgrade wherein a display window prompts a user for product key information is well known in the art, as admitted by the Applicant on page 11 on the remakes filed on 8/31/2004. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing means of an operating system and the memory means for storing BIOS information with the well know means to upgrade an operating system by inputting and storing the operating system product key information when prompted by an input window because the input window causes the user to input the proper number of characters to be stored in the system allowing the system to enter and store the product key.

In regard to claim 2, incorporating the rejection of claim 1:

“...wherein the storing means is a boot device.”

Art Unit: 2193

Hoggarth discloses a standard client device having memory and a boot mechanism (e.g., see Figures 1 and 2; Abstract).

In regard to claim 4, incorporating the rejection claim 1:

“...wherein the writing means is a program installed in the storing means.”

Hoggarth discloses an installation program that writes key information to memory (column 9, lines 25 – 38).

In regard to claim 5, incorporating the rejection of claim 1:

“...wherein the input means is a program.”

Hoggarth discloses an installation program that writes key information to memory (column 9, lines 25 – 38).

In regard to claim 8:

“reading out the product key information from the auxiliary memory;

checking whether the read-out product key information is matched with product key information of an operating system program that will be reinstalled; and

if matched, automatically inputting the product key information in a product key information to input window displayed on a screen corresponding to an installation procedure for reinstalling the operating system program.”

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means, and the Aptiva reference discloses a product key for an operating system, and a window input means for the user input (pages 1 and 2), but neither Hoggarth nor the Aptiva reference discloses read-out product key information. However, Krosner discloses that a user may be prompted for information in a field when installing

Art Unit: 2193

an operating system by having a suggested possible entry (a read-out field; column 1, lines 33 – 53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, and further modified by the Krosner invention having the ability to prompt the user with suggested information, because the modification obviously allows the user to retrieve information from the system without referring to any other resources like installation documentation and Krosner even mentions installing operating systems and prompting the user possible entries during the installation (column 1, lines 52), which is a motivation to combine the Hoggarth and Aptiva with Krosner.

In regard to claim 9, incorporating the rejection of claim 8:

“...wherein said step of checking comprises comparing the read-out product key information with product key information of an operating system program stored on a recovery CD-ROM in a CD-ROM drive.”

Hoggarth discloses a CD-ROM in a CD-ROM drive for system administrator use (column 4, lines 26 – 29), and the APTIVA reference explicitly discloses a system recovery CD containing the product key information (page 2). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key from a CD-ROM as taught by the Aptiva reference, because the combination provides a means for a user to install any software package, including an operating system, having a product key or any other relevant information, as

Art Unit: 2193

taught by Hoggarth, in a clear methodical way through a window prompting the use, to install the software in a proper sequence.

In regard to claim 10, incorporating the rejection of claim 8:

“...wherein said step of checking comprises comparing the read-out product key information with product key information of an operating system program stored on a hard disk of a recovery hard disk drive.”

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means, but neither Hoggarth nor the Aptiva reference discloses read-out product key information. However, Krosner discloses that a user may be prompted for information in a field when installing an operating system by having a suggested possible entry (a read-out field; column 1, lines 33 – 53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, and further modified by the Krosner invention having the ability to prompt the user with suggested information, because the modification obviously allows the user to retrieve information from the system without referring to any other resources like installation documentation and Krosner even mentions installing operating systems and prompting the user possible entries during the installation (column 1, lines 52), which is a motivation to combine the Hoggarth and Aptiva with Krosner.

Art Unit: 2193

In regard to claim 11:

“manually inputting, using one of said input devices, product key information corresponding to said operating system program, said product key information being input into a product key input window of a product key input screen displayed on said display device;

executing a key input program stored on said hard disk for writing said product key information into a predetermined storage area of said CMOS RAM;

executing a recovery program stored in a recovery storage device when said operating system program fails;

reading out said product key information from said CMOS RAM when said recovery program is executed;

comparing said product key information read out from said CMOS RAM with product key information stored in said recovery storage device; and

automatically inputting the product key information read out from said CMOS RAM into said product key input window of the product key input screen displayed on said display device.”

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means (column 10, lines 1 – 19). Although “product key information” is not explicitly noted, client serial number and any additional user defined data is allowed. However, the Aptiva reference explicitly discloses a product key for an operating system, and a window input means for the user input (pages 1 and 2), but neither Hoggarth nor the Aptiva reference discloses read-out product key information. However, Krosner discloses that a user may be prompted for information in a field when installing an operating system by having a suggested possible entry (a read-out field; column 1, lines 33 – 53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS

Art Unit: 2193

ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, and further modified by the Krosner invention having the ability to prompt the user with suggested information, because the modification allows obviously allows the user to retrieve information from the system without referring to any other resources like installation documentation; and Krosner even mentions installing operating systems and prompting the user possible entries during the installation (column 1, lines 52), which is a motivation to combine the Hoggarth and Aptiva with Krosner.

In regard to claim 12, incorporating the rejection of claim 11:

“...further comprising a step of storing said product key information manually input into said product key input window onto said hard disk.”

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means (column 10, lines 1 – 19). Although “product key information” is not explicitly noted, client serial number and any additional user defined data is allowed. However, the Aptiva reference explicitly discloses a product key for an operating system, and a window input means for the user input (pages 1 and 2).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, because the combination provides a means for a user to install any software package, including an operating system, having a product key or any other relevant information, as taught by

Art Unit: 2193

Hoggarth, in a clear methodical way through a window prompting the use, to install the software in a proper sequence.

In regard to claim 21, incorporating the rejection of claim 11:

“...wherein the step of executing a recovery program comprises reading a recovery program stored on a second hard disk of a second hard disk drive.”

See Hoggarth Figure 2 for various computer readable media available in the Hoggarth invention.

In regard to claim 22, incorporating the rejection of claim 11:

“...wherein the step of executing a recovery program comprises reading a recovery program stored on a recovery CD-ROM in a CD-ROM drive.”

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means (column 10, lines 1 – 19), but does not explicitly disclose a recovery program. However, the Aptiva reference does disclose a recovery program (Page 2, no. 3). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the reading of a program from a disk as taught by Hoggarth with the program being a recovery program as taught by the Aptiva reference because the combination clearly allows one using the Hoggarth invention to modify the input program to include a recovery program as taught by the Aptiva reference on page 2.

8. Claims 3; 13, and 15 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 in view of “Installing Windows 98 on an Aptiva 2168 system”, and further in view of Krosner et al., U.S. Patent

Art Unit: 2193

5,905,494, as applied to claims 1 and 12 respectively above, and further in view of Micali, U.S. Patent 5,793,868.

In regard to claim 3, incorporating the rejection of claim 1:

“...wherein the memory means further stores information indicating the type of operating system program that was installed and indicating a compress conversion process of the product key information.”

Hoggarth teaches a configuration system that queries the user for appropriate information used to configure the software, but neither Hoggarth, Aptiva, nor Krosner explicitly teaches compression of product key information. However, Micali teaches a certificate revocation system in which certificate information is compressed (column 4, lines 29 – 46). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Hoggarth combined with Aptiva and Krosner, with the certificate compression technique as taught by Micali because the compression of the product key information allows efficient conveyance of the information as taught by Micali at column 8, lines 6 – 9.

In regard to claim 13, incorporating the rejection of claim 12:

*“...said step of executing a key input program comprising the steps of:
reading said key input program from said hard disk;”*

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means, but neither Hoggarth nor the Aptiva reference discloses read-out product key information. However, Krosner discloses that a user may be prompted for information in a field when installing an operating system by having a suggested possible

Art Unit: 2193

entry (a read-out field; column 1, lines 33 – 53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, and further modified by the Krosner invention having the ability to prompt the user with suggested information, because the modification obviously allows the user to retrieve information from the system without referring to any other resources like installation documentation.

“encoding said product information using a compression conversion process to produce encoded product key information; and”

Hoggarth teaches a configuration system that queries the user for appropriate information used to configure the software, but neither Hoggarth, Aptiva, nor Krosner explicitly teaches compression of product key information. However, Micali teaches a certificate revocation system in which certificate information is compressed (column 4, lines 29 – 46). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Hoggarth combined with Aptiva and Krosner, with the certificate compression technique as taught by Micali because the compression of the product key information allows efficient conveyance of the information as taught by Micali at column 8, lines 6 – 9.

“storing said encoded product key information in said predetermined storage area of said CMOS RAM.”

Hoggarth discloses a memory means storing information by a BIOS ROM storing any user defined data by prompting the user, and a writing means for writing information into the memory means (column 10, lines 1 – 19). It is well known in the art that CMOS

Art Unit: 2193

RAM is implemented in many computer systems, especially used to store parameters in low power battery-backed memory as disclosed in the Microsoft Computer Dictionary, Fifth Edition, p. 105.

In regard to claim 15, incorporating the rejection of claim 13:

“...wherein said product key information is comprised of a plurality of ASCII characters and said compression conversion process comprises the steps of:

converting each ASCII character into a six bit code; and

generating hexadecimal values for storage in said CMOS RAM by grouping the bits of the six bit codes corresponding to every four ASCII characters into three bytes.”

Hoggarth teaches a configuration system that queries the user for appropriate information used to configure the software, but neither Hoggarth, Aptiva, nor Krosner teaches converting ASCII characters into six-bit code. Official notice is taken that conversion of ASCII code to hexadecimal format and mapping ASCII values into x-length strings of bytes in memory would have been well known to one skilled in the art at the time the invention was made for data packing. Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Hoggarth regarding the storage of product information with the well known knowledge of converting ASCII characters into six-bit code in order for the Hoggarth system to store information in hexadecimal format.

In regard to claim 16, incorporating the rejection of claim 15:

“...wherein said step of converting each ASCII character into a six bit code comprises subtracting the hexadecimal value 30h from the hexadecimal of the ASCII character.”

Art Unit: 2193

Hoggarth teaches storage of product information entered by the user, but neither Hoggarth, Aptiva, nor Krosner teaches converting each ASCII character into a six-bit code comprises subtracting the hexadecimal value 30h from the hexadecimal of the ASCII character. Official notice is taken that subtracting 30h from the hexadecimal value of the ASCII character to convert the ASCII character would have been well known to one skilled in the art at the time the invention was made. Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Hoggarth regarding the storage of product information with the well known knowledge of subtracting 30h from the hexadecimal value of the ASCII character to convert the ASCII character in order for the Hoggarth system combined with the auto fill form of Krosner to display ASCII characters in the pop-up window.

In regard to claim 17, incorporating the rejection of claim 15:

“...wherein said step of converting each ASCII character into a six bit code comprises reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values.”

Hoggarth teaches storage of product information entered by the user, but neither Hoggarth, Aptiva, nor Krosner teaches reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values. Official notice is taken that using a hexadecimal to binary conversion lookup table would have been well known to one skilled in the art at the time the invention was made. Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Hoggarth regarding the storage of product information with the well known knowledge of reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to

Art Unit: 2193

binary values in order for the Hoggarth system combined with the auto fill form of Krosner to more efficiently processed the code.

In regard to claim 18, incorporating the rejection of claim 13:

"...wherein said product key information is comprised of a plurality of ASCII characters and said compression conversion process comprises the steps of:

converting each ASCII character into a five bit code; and

generating hexadecimal values for storage in said CMOS RAM by grouping the bits of the five bit codes corresponding to every three ASCII characters into two bytes."

Hoggarth teaches storage of product information entered by the user, but neither Hoggarth, Aptiva, nor Krosner teaches converting ASCII characters into six-bit code. Official notice is taken that conversion of ASCII code to hexadecimal format and generating hexadecimal values for storage by grouping the bits of the five bit codes corresponding to every three ASCII characters into two bytes would have been well known to one skilled in the art at the time the invention was made. Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Hoggarth regarding the storage of product information with the well known knowledge of converting ASCII characters into six-bit code in order for the Hoggarth system to store information in hexadecimal format more efficiently than straight ASCII format.

In regard to claim 19, incorporating the rejection of claim 18:

"...wherein said step of converting each ASCII character into a five bit code comprises reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values."

Art Unit: 2193

Hoggarth teaches storage of product information entered by the user, but neither Hoggarth, Aptiva, nor Krosner teaches reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values. Official notice is taken that using a hexadecimal to binary conversion lookup table would have been well known to one skilled in the art at the time the invention was made. Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Hoggarth regarding the storage of product information with the well known knowledge of reading preset hexadecimal values for each ASCII character from a code table and changing the read hexadecimal values to binary values in order for the Hoggarth system combined with the auto fill form of Krosner to more efficiently process the code.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 in view of "Installing Windows 98 on an Aptiva 2168 system," and further in view of Krosner et al., U.S. Patent 5,905,494, and further in view of Micali, U.S. Patent 5,793,868, as applied to claim 13, and further in view of Miura, U.S. Patent 6,021,408.

In regard to claim 14, incorporating the rejection of claim 13:

"...further comprising a step of uninstalling said key input program from said hard disk after said storing step."

Hoggarth teaches a configuration system that queries the user for appropriate information used to configure the software, but neither Hoggarth, Aptiva, nor Krosner explicitly teaches deletion of the writing program after the product information is written

Art Unit: 2193

to memory. However, Miura teaches the deletion of a program after execution (column 4, lines 29 – 33). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Hoggarth combined with Aptiva and Krosner, with the function of deleting a program after execution as taught by Miura, because this combination provides another level of security to the by preventing an unauthorized installation in the case where only one installation is allowed, and frees up memory resources.

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 in view of “Installing Windows 98 on an Aptiva 2168 system,” and further in view of Krosner et al., U.S. Patent 5,905,494, as applied to claim 11, and further in view of Pearce et al., U.S. Patent 6,243,468 (hereinafter referred to as Pearce).

In regard to claim 20, incorporating the rejection of claim 11:

“...further comprising a step of checking a checksum of said product key information read out from said CMOS RAM before comparing said product key information read out from said CMOS RAM with product key information stored in said recovery storage device.”

Neither Hoggarth, Aptiva, nor Krosner teaches the checking of a checksum of stored key information. However, Pearce teaches the use of a checksum in associated with the product key information (column 2, lines 44 – 60). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the configuration system of Hoggarth with the checksum feature of Pearce, because the checksum provides a layer of error correction, and also security, by ensuring that the

Art Unit: 2193

proper information is being used for the key product information, especially in a transmission download over a network as taught by Hoggarth (e.g., see Figure 2).

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 in view of "Installing Windows 98 on an Aptiva 2168 system."

In regard to claim 6:

"making a user manually input the product key information corresponding to a procedure of installing the operating system program;"

"executing a product key information writing program;"

"writing the manually input product key information into the auxiliary memory."

Hoggarth discloses a computer system with a central processing unit, a main memory, a BIOS ROM an auxiliary memory for storing information set by the BIOS, having an operating system with product key information and a method of writing that information to the auxiliary memory when an operating system is installed (e.g., Figure 2 and applicable text at column 4, lines 1 – 16). The system prompts the user for information about the system collected at install time and an installation program writes the information into non-volatile (auxiliary) memory (column 9, line 25 to column 10, line 20). Hoggarth does not explicitly disclose any of the installation information as product key information. However, the Aptiva reference explicitly discloses a product key for an operating system input by a user during an installation procedure. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the storing of information by a BIOS ROM and a writing means for writing user

Art Unit: 2193

input information as taught by Hoggarth with the user window input means to input an operating system product key as taught by the Aptiva reference, because the combination provides a means for a user to install any software package, including an operating system, having a product key or any other relevant information, as taught by Hoggarth, in a clear methodical way through a window prompting the use, to install the software in a proper sequence.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth et al., U.S. Patent 6,535,976 in view of "Installing Windows 98 on an Aptiva 2168 system," as applied to claim 6 above, and further in view of Miura, U.S. Patent 6,021,408.

In regard to claim 7, incorporating the rejection of claim 6:

"...further comprising a step of deleting the product key information writing program after the product key information is written into the auxiliary memory."

Hoggarth teaches a configuration system that queries the user for appropriate information used to configure the software, but neither Hoggarth, Aptiva, nor Krosner explicitly teaches deletion of the writing program after the product information is written to memory, although one skilled in the art would have reasonably expected that software no longer needed would be deleted as is well known in the art with JAVA automatic garbage collection systems. However, Miura teaches the deletion of a program after execution (column 4, lines 29 – 33). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the configuration system of Hoggarth combined with Aptiva and Krosner, with the function of deleting a program

Art Unit: 2193

after execution as taught by Miura, because this combination provides another level of security to the by preventing an unauthorized installation in the case where only one installation is allowed, and frees up memory resources.

Response to Arguments

13. Applicant's arguments filed on 8/31/2004 have been fully considered but they are not persuasive:

The Applicant has argued:

(A) Regarding claim 6:

"As noted with respect to claim 1, there is no teaching in the art of *writing the manually input product key information into the auxiliary memory*.

The art fails to provide any motivation which would have suggested, to one of ordinary skill in the art, modifying Hoggarth or the combination of Hoggarth and Aptiva to include a feature of *writing the manually input product key information into the auxiliary memory*."

Examiner's response:

Firstly, with regard to writing the product key, a system that inputs product key information must inherently store this information. It is well known in the art that the Windows™ operating system stores product key information in a registry file. The information is inherently stored somewhere. Also, it is not agreed that manually inputting information is not taught in the art. Hoggarth teaches prompting user information (column 10, lines 1 – 19), and Aptiva similarly teaches this feature with the input clearly being product key information for an operating system. One would be motivated to combine the references to modify the program loading of Hoggarth to include operating system software prompting the product key.

Art Unit: 2193

(B) Regarding claim 11:

"Accordingly, the feature of executing a key input program stored on said hard disk for writing said product key information into a predetermined storage area of said CMOS RAM set forth in claim 11 is not taught by the art." (page 15)

"Additionally, as discussed above, the art fails to teach each of the features of reading out said product key information from said CMOS RAM when said recovery program is executed; comparing said product key information read out from said CMOS RAM with product key information stored in said recovery storage device; and automatically inputting the product key information read out from said CMOS RAM into said product key input window of the product key input screen displayed on said display device as set forth in claim 11." (page 15)

"Accordingly, the teachings in Krosner referred to by the Examiner would not have suggested modification of an system allowing reinstallation of an operating system, to automatically display the unique product key of an operating system." (page 14)

Examiner's Response:

Firstly, with regard to writing the product key, a system that inputs product key information must inherently store this information. It is well known in the art that the Windows™ operating system stores product key information in a registry file. The information is inherently stored somewhere.

Regarding automatically inputting the product key information into the product key window. Krosner clearly states that modern data processing systems may present users a suggested entry, and in fact even mentions installing operating systems and prompting the user possible entries (column 1, lines 33 – 52). Therefore, it is not agreed that the teachings in Krosner referred to by the Examiner would not have suggested modification of an system allowing reinstallation of an operating system, to automatically display the unique product key of an operating system.

Art Unit: 2193

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Shrader whose telephone number is (571) 272-3734. The examiner can normally be reached on M-F 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2193

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lawrence Shrader
Examiner
Art Unit 2193

27 May 2005

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SUPERVISORY PATENT EXAMINER
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